CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A method comprising mixing a polyisocyanate component with a polyol component in the presence of at least one catalyst for the reaction of a polyol or water with a polyisocyanate and subjecting the mixture to conditions sufficient to cure to form a rigid polyurethane foam having a decreased water absorption characteristic, wherein (a) the polyisocyanate component contains an isocyanate-terminated prepolymer made by reacting an excess of an organic polyisocyanate with (i) at least one polyol and (ii) at least one hydroxyfunctional acrylate, (b) the polyol component contains comprises an effective amount of a blowing agent and isocyanate-reactive materials that include at least one comprising a hydrophobic polyol biopolymer comprising an ester of a fatty acid and glycerol, the polyol component further comprising a second polyol being a non-biopolymer and wherein the biopolymer is present in up to 40 wt% of the total polyol component, and the biopolymer being present in an amount less than the second polyol; (c) the ratio of isocyanate groups in the polyisocyanate component to the number of isocyanate-reactive groups in the polyol component is less than 1:1; and (d) the polyisocyanate component has a functionality of between about 2.0 and about 4.0.
- 2. (Original) The invention according to claim 1, wherein the polyurethane foam has a bulk density in the range of about 2 to about 40 pounds per cubic foot.

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- 3. (Original) The invention according to claim 1, wherein the volume ratio of the polyisocyanate component to polyol component is about 1:1.
- 4. (Original) The invention according to claim 1, wherein the hydroxy-functional acrylate is a methacrylate.
- 5. (Original) The invention according to claim 1, wherein at least one polyol in the polyol component contains a tertiary amine group.
- 6. (Original) The invention according to claim 1, wherein the catalyst includes a reactive amine catalyst.
- 7. (Original) The invention according to claim 1, wherein the blowing agent is water or a chemical blowing agent that releases CO₂.
- 8. (Original) The invention according to claim 1, wherein the organic polyisocyanate is MDI or a polymeric MDI.
- 9. (Original) The invention according to claim 1, wherein the foam is formed into an automotive component.
- 10. (Currently Amended) A product comprising a rigid polyurethane foam formed by mixing a polyisocyanate component with a polyol component in the presence of at least one catalyst for the reaction of a polyol or water with a polyisocyanate and subjecting the mixture to

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conditions sufficient to cure to form a rigid polyurethane foam having a decreased water

absorption characteristic, wherein (a) the polyisocyanate component contains comprises an

isocyanate-terminated prepolymer made by reacting an excess of an organic polyisocyanate

with (i) at least one polyol and (ii) at least one hydroxy-functional acrylate, (b) the polyol

component contains an effective amount of a blowing agent and isocyanate-reactive materials

that include at least one hydrophobic biopolymer polyol comprising an ester of a fatty acid and

glycerol, the polyol component further comprising a second polyol and wherein the biopolymer

is present in an amount up to 40 wt% of the total polyol component, and the biopolymer being

present in an amount less than the second polyol, and wherein the second polyol comprises at

least one of an alkyline glycol, glycoether, glycerine, trimethylolpropane, terniary amine-

containing polyol, triisopropanolamine, polyether polyol or polyester polyol; (c) the ratio of

isocyanate groups in the polyisocyanate component to the number of isocyanate-reactive

groups in the polyol component is less than 1:1; and (d) the polyisocyanate component has a

functionality of between about 2.0 and about 4.0.

11. (Original) The invention according to claim 10, wherein the polyurethane foam

has a bulk density in the range of about 2 to about 40 pounds per cubic foot.

12. (Original) The invention according to claim 10, wherein the volume ratio of the

polyisocyanate component to polyol component is about 1:1.

13. (Original) The invention according to claim 10, wherein the hydroxy-functional

acrylate is a methacrylate.

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- 14. (Original) The invention according to claim 10, wherein at least one polyol in the polyol component contains a tertiary amine group.
- 15. (Original) The invention according to claim 10, wherein the catalyst includes a reactive amine catalyst.
- 16. (Original) The invention according to claim 10, wherein the blowing agent is water or a chemical blowing agent that releases CO₂.
- 17. (Original) The invention according to claim 10, wherein the organic polyisocyanate is MDI or a polymeric MDI.
- 18. (Original) The invention according to claim 10, wherein the foam is formed into an automotive component.
- 19. (Currently Amended) A product comprising a rigid polyurethane foam formed by mixing a polyisocyanate component with a polyol component in the presence of at least one catalyst for the reaction of a polyol or water with a polyisocyanate and subjecting the mixture to conditions sufficient to cure to form a rigid polyurethane foam having a decreased water absorption characteristic and having a bulk density in the range of about 2 to about 40 pounds per cubic foot, wherein (a) the polyisocyanate component contains comprises an isocyanate-terminated prepolymer made by reacting an excess of an organic polyisocyanate with (i) at least one polyol and (ii) at least one hydroxy-functional acrylate, (b) the polyol component contains an effective amount of a blowing agent and isocyanate-reactive materials that include at least one

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hydrophobic biopolymer polyol comprising an ester of a fatty acid and glycerol, the polyol

component further comprising a second polyol being a non-biopolymer and wherein the

biopolymer is present in up to 40 wt% of the total polyol component, and the biopolymer being

present in an amount less than the second polyol; (c) the ratio of isocyanate groups in the

polyisocyanate component to the number of isocyanate-reactive groups in the polyol component

is less than 1:1, wherein the volume ratio of the polyisocyanate component to polyol component

is about 1:1; and (d) the polyisocyanate component has a functionality of between about 2.0 and

about 4.0.

20. (Original) The invention according to claim 19, wherein the hydroxy-functional

acrylate is a methacrylate.

21. (Original) The invention according to claim 19, wherein at least one polyol in the

polyol component contains a tertiary amine group.

22. (Original) The invention according to claim 19, wherein the catalyst includes a

reactive amine catalyst.

23. (Original) The invention according to claim 19, wherein the blowing agent is

water or a chemical blowing agent that releases CO₂.

24. (Original) The invention according to claim 19, wherein the organic

polyisocyanate is MDI or a polymeric MDI.

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25. (Original) The invention according to claim 19, wherein the foam is formed into

an automotive component.

26-47. (Canceled)

48. (Previously Presented) The invention according to claim 1 wherein the ester is

from at least one of castor oil or soybean oil.

49. (Previously Presented) The invention according to claim 1 further comprising

using the rigid polyurethane foam as a reinforcing foam or crash support foam in an automobile.

50. (Previously Presented) The invention according to claim 1 further comprising

using the rigid polyurethane foam to make a headliner, doorframe, pillar or rocker panel in an

automobile.

51. (New) A method as set forth in claim 1 wherein the second polyol comprises

polyether polyol comprising co-polymerized styrene and acrylonitrile.

52. (New) A method as set forth in claim 1 wherein the second polyol comprises

polyether aromatic amine polyol.

53. (New) A method as set forth in claim 19 wherein the second polyol comprises

polyether polyol comprising co-polymerized styrene and acrylonitrile.

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54. (New) A method as set forth in claim 19 wherein the second polyol comprises polyether aromatic amine polyol.